

**ABSTRACT OF THE INVENTION**

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2       An ultrasound imaging device having a cableless coupling for coupling a two-  
3 dimensional array of ultrasound transducers to a signal generating and receiving unit such as a  
4 motherboard. The coupling includes an acoustically attenuating and electrically conductive  
5 structure, which can include posts that are electrically conductive or electrically insulative  
6 having a conductor embedded or mounted on the outer surface. There can also be a high  
7 density connector allowing coupling and de-coupling the two dimensional array to and from  
8 the motherboard.